

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) An optical disk ~~storing a data structure for managing reproduction of at least one of video and audio data performed by a reproduction device, the optical disk comprising:~~

~~a first and~~ stream files, the first stream file including first video data corresponding to a first reproduction path, the second stream file including second video data corresponding to a second reproduction path ~~the at least one of video and audio data;~~

~~a first and second clip information files, the first clip information file including timing information of the at least one of video and audio data, the timing information including an a first entry point map mapping presentation time stamps to source packet addresses of the first video data at least one of video and audio data, the second clip information file including a second entry point map mapping presentation time stamps to source packet addresses of the second video data;~~

~~a first and second playlist files, the first playlist file including at least one playitem identifying a pair of in-point and out-point pointing to the presentation time stamps in a clip of the first video data at least one of video and audio data, the second playlist file including at least one playitem identifying a pair of in-point and out-point pointing to the presentation time stamps in a clip of the second video data; and~~

at least one navigation file including first and second ~~a~~ path items, the first path item including a first navigation command for launching the first ~~a single~~ playlist file,

~~the second path item including a second navigation command for launching the second playlist file and a second navigation command for proceeding to a next path item, the path item providing parental control information for the at least one of video and audio data,~~

wherein the first and second stream files, the first and second clip information files, the first and second playlist files and the navigation file are separate files ~~and have different file extensions~~ from each other.

2.-14. (Cancelled)

15. (Currently Amended) The optical disk of claim 1, wherein the first path item further includes a length field indicating a length of the first path item, and the second path item further includes a length field indicating a length of the second path item.

16. (Currently Amended) The optical disk of claim 1, wherein the first path item further includes an attribute field indicating at least one attribute of the first path item, and the second path item further includes an attribute field indicating at least one attribute of the second path item.

17. (Currently Amended) The optical disk of claim 1, wherein the navigation file further includes a field indicating ~~the~~ a number of ~~the~~ path items in the navigation file.

18. (Cancelled)

19. (Currently Amended) A method of recording a data structure for managing reproduction of video data ~~at least one of video and audio data~~ on an optical disk, the method comprising:

recording ~~a first and second~~ stream files on the optical disk, the first stream file including first video data corresponding to a first reproduction path, the second stream file including second video data corresponding to a second reproduction path ~~at least one of video and audio data on the optical disk~~;

recording ~~a first and second~~ clip information files on the optical disk, the first clip information file including ~~timing information of the at least one of video and audio data on the optical disk~~, the ~~timing information including an~~ a first entry point map mapping presentation time stamps to source packet addresses of the first video data ~~at least one of video and audio data~~, the second clip information file including a second entry point map mapping presentation time stamps to source packet addresses of the second video data;

recording ~~a first and second~~ playlist files on the optical disk, the first playlist file including at least one playitem identifying a pair of in-point and out-point pointing to the presentation time stamps in a clip of the first video data ~~at least one of video and audio data on the optical disk~~, the second playlist file including at least one playitem identifying a pair of in-point and out-point pointing to the presentation times stamps in a clip of the second video data; and

recording at least one navigation file including ~~a first and second~~ path items on the optical disk, the first path item including a first navigation command for launching ~~the first~~ a single playlist file, the second path item including a second navigation command for launching the second playlist file ~~and a second navigation command for proceeding a next path item~~, the ~~path item providing parental control information for the at least one of video and audio data~~,

wherein the first and second stream files, the first and second clip information files, the first and second playlist files and the navigation file are separate files and have different file extensions from each other.

20. (Currently Amended) A method of reproducing a data structure for managing reproduction of at least one of video and audio data recorded on an optical disk, the method comprising:

~~reproducing~~ reading at least one navigation file including first and second a path items recorded on the optical disk, the first path item including a first navigation command for launching a first single playlist file, the second path item including a second navigation command for launching a second playlist file and a second navigation command for proceeding a next path item, the path item providing parental control information for the at least one of video and audio data;

~~reproducing~~ reading the first playlist file recorded on the optical disk launched by the navigation command, the first playlist file including at least one playitem identifying a pair of in-point and out-point pointing to presentation time stamps in a clip of first video data corresponding to a first reproduction path the at least one of video and audio data recorded on the optical disk;

~~reproducing~~ reading a first clip information file including timing information of the at least one of video and audio data recorded on the optical disk, the timing information including an a first entry point map mapping the presentation time stamps to source packet addresses of the first video data at least one of video and audio data; and

reproducing the first video data included in a first stream file including the at least one of video and audio data recorded on the optical disk;[[.]]

reading the second playlist file recorded on the optical disk, the second playlist file including at least one playitem identifying a pair of in-point and out-point pointing to presentation time stamps in a clip of second video data corresponding to a second reproduction path;

reading a second clip information file including a second entry point map mapping the presentation time stamps to source packet addresses of the second video data; and

reproducing the second video data included in a second stream file recorded on the optical disk,

wherein the first and second stream files, the first and second clip information files, the first and second playlist files and the navigation file are separate files and have different file extensions from each other.

21. (Currently Amended) An apparatus for recording a data structure for managing reproduction of at least one of video and audio data on an optical disk, the apparatus comprising:

a pickup configured to record data on a stream file including the at least one of video and audio data on the optical disk; and

a controller configured to control the pickup to record first and second stream files, the first stream file including first video data corresponding to a first reproduction path, the second stream file including second video data corresponding to a second reproduction path;

record a first and second clip information files on the optical disk, the first clip information file including timing information of the at least one of video and audio data on the optical disk, the timing information including an a first entry point map mapping presentation time stamps to source packet addresses of the first video data

~~at least one of video and audio data, the second clip information file including a second entry point map mapping presentation time stamps to source packet addresses of the second video data;~~

~~the controller configured to record a first and second playlist files on the optical disk, the first playlist file including at least one playitem identifying a pair of in-point and out-point pointing to the presentation time stamps in a clip of the first video data at least one of video and audio data on the optical disk, the second playlist file including at least one playitem identifying a pair of in-point and out-point pointing the presentation time stamps in a clip of the second video data, and~~

~~the controller configured to record at least one navigation file including first and second path items on the optical disk, the first path item including a first navigation command for launching the first a single playlist file, the second path item including a second navigation command for launching the second playlist file and a second navigation command for proceeding a next path item, the path item providing parental control information for the at least one of video and audio data in the navigation file,~~

~~wherein the first and second stream files, the first and second clip information files, the first and second playlist files and the navigation file are separate files and have different file extensions from each other.~~

22. (Currently Amended) An apparatus for reproducing ~~a data structure for managing reproduction of at least one of video and audio data~~ recorded on an optical disk, the apparatus comprising:

a pickup configured to reproduce data recorded ~~on~~ ~~in~~ the optical disk;

a controller configured to control the pickup to

~~read-reproduce~~ at least one navigation file including first and second ~~a path items~~ recorded on the optical disk, the first path item including a first navigation

command for launching a first ~~single~~ playlist file, the second path item including a second navigation command for launching a second playlist file ~~and a second navigation command for proceeding a next path item, the path item providing parental control information for the at least one of video and audio data,~~

~~the controller configured to read reproduce~~ the first playlist file recorded on the optical disk ~~launched by the navigation command,~~ the first playlist file including at least one playitem identifying a pair of in-point and out-point pointing to presentation time stamps in a clip of first video data corresponding to a first reproduction path ~~the at least one of video and audio data recorded on the optical disk,~~

~~the controller configured to reproduce read~~ a first clip information file including timing information of the ~~at least one of video and audio data recorded on the optical disk,~~ the timing information including an a first entry point map mapping the presentation time stamps to source packet addresses of the first video data ~~at least one of video and audio data, and~~

~~the controller configured to reproduce~~ the first video data included in a first stream file recorded on the optical disk ~~a stream file including the at least one of video and audio data recorded on the optical disk,~~

read the second playlist file including at least one playitem identifying a pair of in-point and out-point pointing to presentation time stamps in a clip of second video data corresponding to a second reproduction path,

read a second clip information file including a second entry point map mapping the presentation time stamps to source packet addresses of the second video data, and

reproduce the second video data included in a second stream file recorded on the optical disk,

wherein the first and second stream files, the first and second clip information files, the first and second playlist files and the navigation file are separate files ~~and have different file extensions~~ from each other.

23.-26. (Cancelled)

27. (Currently Amended) The apparatus of claim 22, wherein the first and second video data form ~~at least one of video and audio data forms~~ different parental control reproduction paths, and the apparatus further comprises:

an interface unit configured to communicate with the controller to select one of the different parental control reproduction paths.

28. (Currently Amended) The apparatus in claim 27, wherein the interface unit receives user input on the different parental control reproduction paths, and the controller controls the reproduction of the first and second video data ~~at least one of video and audio data~~ based on the user input.

29. (Cancelled)

30. (Currently Amended) The method of claim 19, wherein the first path item further includes an attribute field indicating at least one attribute of the first path item, and the second path item further includes an attribute field indicating at least one attribute of the second path item.

31. (Currently Amended) The method of claim 19, wherein the navigation file further includes a field indicating the number of ~~the~~ path items in the navigation file.

32. (Currently Amended) The method of claim 20, wherein the first path item further includes an attribute field indicating at least one attribute of the first path item, and the second path item further includes an attribute field indicating at least one attribute of the second path item.

33. (Currently Amended) The method of claim 20, wherein the navigation file further includes a field indicating the number of ~~the~~ path items in the navigation file.

34. (Currently Amended) The apparatus of claim 21, wherein the first path item further includes an attribute field indicating at least one attribute of the first path item, and the second path item further includes an attribute field indicating at least one attribute of the second path item.

35. (Currently Amended) The apparatus of claim 21, wherein the navigation file further includes a field indicating the number of ~~the~~ path items in the navigation file.

36. (Currently Amended) The apparatus of claim 22, wherein the first path item further includes an attribute field indicating at least one attribute of the first path item, and the second path item further includes an attribute field indicating at least one attribute of the second path item.

37. (Currently amended) The apparatus of claim 22, wherein the navigation file further includes a field indicating the number of ~~the~~ path items in the navigation file.

38. (New) The optical disk of claim 1, wherein the first path item includes a third navigation command for proceeding to a third path item, and the second path item includes a fourth navigation command for proceeding the third path item.

39. (New) The method of claim 19, wherein the first path item includes a third navigation command for proceeding to a third path item, and the second path item includes a fourth navigation command for proceeding the third path item.

40. (New) The method of claim 20, wherein the first path item includes a third navigation command for proceeding to a third path item, and the second path item includes a fourth navigation command for proceeding the third path item.

41. (New) The apparatus of claim 21, wherein the first path item includes a third navigation command for proceeding to a third path item, and the second path item includes a fourth navigation command for proceeding the third path item.

42. (New) The apparatus of claim 22, wherein the first path item includes a third navigation command for proceeding to a third path item, and the second path item includes a fourth navigation command for proceeding the third path item.